

CLAIMS

What is claimed is:

1. A pneumatic radial tire having a bead portion provided therein with a bead core formed by a plurality of sheath wires enveloping a central core, characterized in that:
the sheath has a plurality of steel cords, each cord having at least three filaments; and the central core is made from steel wire or a metal alloy material having a weight less than steel.
2. The pneumatic radial tire of Claim 1 wherein;
the central core material is selected from the group of titanium, aluminum, magnesium, or other alloy
3. The pneumatic radial tire of Claim 1 wherein the bead core has the sheath cords helically wrapped around the central core, forming a cable bead core.
4. The pneumatic radial tire of Claim 1 wherein the bead core has the core being of circular cross-section.
5. The pneumatic radial tire of Claim 1 wherein the bead core has the central core being of a square or rectangular cross-section.
6. The pneumatic radial tire of Claim 1 wherein the bead core has the central core being of a hexagonal cross-section.
7. The pneumatic radial tire of claim 1 wherein the bead core has the central core in a triangular configuration.
8. The pneumatic radial tire of Claim 1 wherein the central core is a singular wire or rod wrapped 360° or more.
9. The pneumatic radial tire of Claim 1 wherein the central core has a plurality of wires wrapped 360° or more.
10. A pneumatic radial tire having a bead portion provided therein with a bead core formed by a plurality of sheath wires enveloping a central core, characterized in that:
the sheath has a plurality of steel cords, each cord having at least three filaments, and the central core is made from a composite or synthetic material having a weight less than steel.